# AFSC 2A6X6 AIRCRAFT ELECTRICAL AND ENVIRONMENTAL SYSTEMS CAREER FIELD EDUCATION AND TRAINING PLAN

This change is effective immediately. This change is the equivalent of publication of a new CFETP. CFETP 2A6X6, October 2002, is changed as follows:

- 1. Write-in changes.
- 1.1. Identify the following tasks as a requirement for upgrade to the 5-skill level by placing an asterisk (\*) in column 2a of CFETP, Attachment 12:

A12.2.3.	A12.6.3.	A12.17.3.
A12.2.5.1.	A12.7.3.	A12.17.5.1.
A12.2.5.2.	A12.7.5.1.	A12.17.6.1
A12.2.7.1.	A12.7.5.3.	A12.18.3.
A12.2.7.2.	A12.7.7.1.	A12.20.3.
A12.3.3.	A12.7.7.3.	A12.21.3.
A12.3.5.1.	A12.8.3.	A12.22.3.
A12.3.6.1.	A12.9.3.	A12.22.5.2
A12.3.7.	A12.11.3.	A12.22.6.2.
A12.4.8.	A12.15.3.	A12.23.2.
A12.5.3.	A12.16.3.	A12.24.3.
A12.5.5.1.	A12.16.5.3.	A12.25.2.1.
A12.5.7.1	A12.16.6.3.	

1.2. Identify the following tasks as a requirement for upgrade to the 7-skill level by placing an asterisk (\*) in column 2b of CFETP Attachment 12:

A12.2.4.	A12.10.3	A12.17.4.
A12.3.4.	A12.10.4	A12.18.4.
A12.4.3.	A12.11.4	A12.20.4.
A12.4.4.	A12.12.3.	A12.21.4.
A12.5.4.	A12.12.4.	A12.22.4.
A12.6.4.	A12.13.3.	A12.23.3.
A12.7.4.	A12.13.4.	A12.24.4.
A12.8.4.	A12.15.4.	A12.25.3.
A12.9.4.	A12.16.4.	

1.3. Delete the asterisk (\*) in Column 2a for the following tasks:

A3.4.5.1

A3.4.7.1

1.4. Other write-in changes:

On page 24, item A2.11.5., change "2b/X" to "2b".

On page 61 Note 1, change Attachment 6 to Attachment 5.

On page 75, item A5.12.7., change "Remove" to "Remove/Install".

On page 96 Note 1, change Attachment 6 to Attachment 7.

On page 178 Note 1, change Attachment 6 to Attachment 10.

On page 188 Note 1, change Attachment 5 to Attachment 11.

On page 202 Note 1, change Attachment 4 to Attachment 12.

On page 215 Note 1, change Attachment 11 to Attachment 13.

On page 237 Note 1, change Attachment 8 to Attachment 14.

On page 248 Note 1, change Attachment 6 to Attachment 15.

On page 248 Note 1, change MH-53J to MH-53.

On pages 248, 253-259 Header, change MH-53J to MH-53.

- 2. Page inserts are identified by date in the upper right hand of each page. Replace the appropriate pages with the attached page inserts. A star  $(\star)$  indicates paragraphs and tasks that have been changed.
- 2.1. Delete pages 1-18. Insert new pages 1-18.2.
- 2.2. Delete pages 249-252. Insert new pages 249-252.
- 2.2. Delete pages 267-268. Insert new pages 267-268.
- 3. After actions required in the above paragraphs have been completed, file this change cover page in the back of the CFETP.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

MICHAEL E. ZETTLER, Lieutenant General, USAF DCS/Installations and Logistics

### CAREER FIELD EDUCATION AND TRAINING PLAN AIRCRAFT ELECTRICAL & ENVIRONMENTAL SYSTEMS AFSC 2A6X6, OCTOBER 2002

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Supersedes: CFETP 2A6X6, Aug 2000	Certified by: HQ USAF/ILMM (CMSgt McMahan)	

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## CAREER FIELD EDUCATION AND TRAINING PLAN AIRCRAFT ELECTRICAL AND ENVIRONMENTAL SYSTEMS SPECIALTY AFSC 2A6X6

#### PART I

#### **PREFACE**

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for 2A6X6, Aircraft Electrical and Environmental Systems Specialty. The CFETP will provide personnel a clear career path to success and instills rigor in all aspects of career field training. This CFETP supersedes 2A6X6 CFETP, August 2000.

NOTE: Civilians occupying associated positions will use Part II to support duty position qualification training.

- 2. The CFETP consists of two parts. Supervisors to will use both parts to plan, manage, and control training.
- **2.1** Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, training, and other). Section D indicates resource constraints to accomplishing this plan, such as funds, manpower, equipment, and facilities. Section E identifies transition training guide requirements for SSgt through MSgt.
- 2.2 Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training; Air Education and Training Command (AETC) conducted training, wartime course/core task and correspondence course requirements. Section B contains the course objective list and training standards supervisors will use to determine if airmen have satisfied training requirements. Section C identifies available support materials, such as Qualification Training Package (QTP) which may be developed to support proficiency training. Section D identifies a training course index that supervisors can use to determine if resources are available to support training. Included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements supervisors can use to determine additional training required for the associated qualification needs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs.

#### ABBREVIATIONS/TERMS EXPLAINED

**Advanced Training**. Formal course which provides individuals who are qualified in their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of an AFS.

**Air Force Job Qualification Standard (AFJQS).** A comprehensive task list that describes a particular job type or duty position. Supervisors use the AFJQS to document task qualifications. The tasks of AFJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document covering the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

**Continuation Training.** This is additional training that exceeds minimum upgrade requirements and has an emphasis on present or future duty assignments.

**Core Task.** Tasks that the Air Force Career Field Manager (AFCFM) identifies as minimum qualification requirements within an Air Force Specialty regardless of duty position. Only a percentage of critical tasks for each system are listed as mandatory core tasks. This gives units needed flexibility to manage their workforce training. Core tasks identified with \*/R are optional for ANG and AFRC.

**Course Objective List (COL).** A publication identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-/7-level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, Developing, Managing and Conducting Military Training Programs

**Enlisted Specialty Training (EST).** A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

**Exportable Training.** Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

**Field Technical Training (Type 4).** Special or regular on-site training conducted by a training detachment (TD) or by a mobile training team (MTT).

**Initial Skills Training.** A formal school course that results in the award of a 3-skill level AFSC.

**Instructional System Development (ISD).** A deliberate and orderly process for developing, validating, and reviewing instructional programs that ensures personnel are taught the knowledge and skills essential for successful job performance.

Occupational Survey Report (OSR). A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

**On-the-Job Training (OJT).** Hands-on, over-the-shoulder training at the duty location used to certify personnel for both skill level upgrade and duty position qualification.

**Qualification Training (QT).** Actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do the job.

**Qualification Training Package (QTP).** An instructional course designed for use at the unit to qualify or aid qualification in a duty position or program or on a piece of equipment. It may be printed, computer based, or in other audiovisual media.

**Resource Constraints.** Resource deficiencies, such as money, facilities, time, manpower, or equipment, that preclude desired training from being accomplished.

**Specialty Training Standard (STS).** An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge an airman may be expected to perform or to know on the job. It serves as a contract between AETC and the functional user to show which of the overall training requirements for an AFSC are taught in formal schools, Career Development Courses, and exportable courses.

**Training Setting.** The type of forum in which training is provided (formal resident school, on-the-job, field training, mobile training team, self-study, etc.).

**Upgrade Training.** A mixture of mandatory courses, task qualification, QTPs, and CDCs required for award of the 3-, 5-, 7-, or 9-skill levels.

**Utilization and Training Workshop (U&TW).** A forum, co-chaired by the AFCFM and Training Pipeline Manager, of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

#### SECTION A - GENERAL INFORMATION

- 1. Purpose. This CFETP provides the information necessary for Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2A6X6 should receive in order to develop and progress throughout their career. This CFETP identifies initial skill, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. This training is conducted by AETC at Sheppard AFB, TX. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or onthe-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:
- **1.1.** Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.
- **1.2.** Identifies tasks and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.
- **1.3.** Lists training courses that are available in the specialty and identifies sources of training, and the training delivery method.
- **1.4.** Identifies major resource constraints which impact full implementation of the desired career field training process.
- **2.** Use of the CFETP. This plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.
- **2.1.** AETC training personnel will develop or revise formal resident, non-resident, Training Detachment (TD), and exportable training based upon requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining the resources needed to provide the identified training.
- **2.2.** MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. OJT, resident training, contract training, or exportable courses can satisfy these identified requirements. MAJCOM developed training, to support this

AFSC, must be identified for inclusion in this plan and must not duplicate other available training resources.

- **2.3.** Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.
- **3. Coordination and Approval.** The AFCFM is the approval authority. The AETC training manager for AFSC 2A6X6 will initiate an annual review of this document by AETC and MFM to ensure currency and accuracy. The using MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. Using the list of courses in Part II, they will eliminate duplicate training.

#### SECTION B - CAREER FIELD PROGRESSION AND INFORMATION

- 4. Specialty Descriptions.
- **4.1**. **Specialty Summary.** Refer to AFMAN 36-2108, *Airman Classification*, paragraph 1. The Aircraft Electrical & Environmental Specialist performs and supervises aircraft electrical and environmental (E&E) functions and activities. Troubleshoots, inspects, removes, installs, repairs, modifies, overhauls, and operates aircraft E & E systems, components, and associated support equipment. Related DoD Occupational Subgroup: 602.
- **4.2. Duties and Responsibilities:** Refer to AFMAN 36-2108, paragraph 2.
- 4.2.1. Aircraft Electrical and Environmental Systems Apprentice and Journeyman: Inspects, troubleshoots, installs, and maintains aircraft power and air distribution systems, subsystems, components, and test equipment using proper technical publications. Visually and operationally tests aircraft electrical and environmental systems and components. Systems maintained include direct and alternating current power systems; aircraft landing, anti-skid, and steering systems; flight and fuel control systems; ignition and electronic engine controls; master caution and warning panels; fire and overheat warning systems; lighting systems; and static and rotary inverters. Also included are systems and components such as bleed air distribution systems; air conditioning, cabin pressurization, NESA glass, and anti-icing systems; oxygen systems; fire extinguishing systems; and turbine drive engine starters; in-flight blade inspection system (IBIS); tail skid system; cargo winch/hoist. Repairs, modifies, and overhauls batteries; electrical and solid state voltage regulators; control, protection, caution, and warning panels; frequency and load, and NESA glass controllers; static and rotary inverters; transformer rectifiers; generators; actuators; relays; timing and sensing devices; systems amplifiers; fire, audible warning, and asymmetry detectors; motors; lighting equipment; cryogenic containers; and other special equipment. Uses electrical and electronic meters and test equipment such as: Manometers; cabin pressure leak and temperature control system testers; thermal switch testers; anti-G suit valve testers; air turbine motor testers; liquid oxygen system testers; multimeters; and ammeters. Services, inspects, and overhauls life raft inflation equipment. Replaces, fabricates, or modifies electrical wiring and connectors. Checks for and treats corrosion. Inspects, services, and performs general aircraft handling procedures. Uses technical orders and schematic diagrams to isolate malfunctions. Maintains inspection and maintenance records. Records pertinent data on

equipment maintenance data collection (MDC) forms and/or enters data into automated maintenance data systems. Recommends methods to improve equipment performance and maintenance procedures. Handles, labels, and disposes of hazardous materials and waste according to environmental standards.

- **4.2.2.** Aircraft Electrical and Environmental Systems Craftsman: Inspects, analyzes, troubleshoots, and maintains aircraft electrical and environmental systems, associated components, subsystems, and test equipment. Advises on problems operating and maintaining aircraft electrical and environmental systems, associated electronic components, subsystems, and test equipment. Solves maintenance problems using wiring diagrams, schematic diagrams, and technical publications by analyzing operating characteristics of electrical and environmental systems. Determines proper maintenance procedures to repair and return systems and components to maximum efficiency. Diagnoses malfunctions and recommends corrective actions. Checks installed and repaired components to ensure compliance with technical publications and directives. Evaluates requirements and prepares quality deficiency reports. Supervises and evaluates job performance and maintenance techniques used to interpret, operate, troubleshoot, remove, repair, service, overhaul, and install aircraft electrical and environmental systems and components. Provides training and task certification for skill level advancement. Ensures compliance with published safety guidelines. Ensures hazardous materials and waste are handled, stored, and disposed of according to environmental standards. **4.2.3. Maintenance Superintendent:** Manages maintenance and staff functions on aircraft electrical and environmental, hydraulic, fuel, and aircrew egress systems. Interprets and evaluates directives and publications, inspection findings, records, and reports and recommends corrective actions. Determines operational status and evaluates operational effectiveness of aircraft and associated systems. Inspects and evaluates maintenance activities and resolves problems. Interprets and establishes safety and training guidelines. Plans, organizes, directs, and controls troubleshooting and repair activities of maintenance personnel. Establishes priorities for completion of maintenance tasks and provides assistance in solving maintenance, supply, and personnel problems. Performs supervisory inspections of, and directs maintenance actions on aircraft systems and components. Evaluates aircraft and system failures to determine need to submit quality deficiency reports. Controls resources, funds, and cost management. Manages handling, storing, and disposing of hazardous materials and waste according to environmental
- **5. Career Skill Progression.** Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential that everyone involved in training do their part to plan, develop, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives viable training at appropriate points in their career

standards.

**5.1. Apprentice** (**3-level**): Upon completion of initial skills training, a trainee will work with a trainer to enhance their knowledge and skills. They will utilize the Career Development Course, Task Qualification Training, and available exportable courses for continued advancement. Once task certified, a trainee may perform the task unsupervised. Apprentices can be considered for appointment as unit trainers after completion of a formal trainer course.

- **5.2. Journeyman** (**5-level**). Once upgraded to the 5-level, the journeyman will enter into continuation training to broaden their experience base by increasing their knowledge and skill in troubleshooting and solving more complex problems. Five-levels may be assigned job positions such as quality assurance and various staff positions. After having 48 months in the Air Force, 5-levels will attend Airman Leadership School (ALS) to enhance their Professional Military Education (PME). Five-levels will be considered for appointment as unit trainers. Individuals will use their CDCs to prepare for Weight Airman Promotion testing. They should also consider continuing their education toward a Community College of the Air Force (CCAF) degree.
- **5.3. Craftsman (7-level):** A craftsman can expect to fill various supervisory and management positions such as shift leader, element chief, expediter, section chief, and task certifier. They can also be assigned to work in staff positions. Craftsmen should take courses to obtain added knowledge on management of resources and personnel. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will complete the Noncommissioned Officer Academy.
- **5.4. Superintendent (9-level):** A 9-level can be expected to fill positions such as flight chief, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will complete the Senior Noncommissioned Officer Academy. Additional higher education and completion of courses outside their career AFSC are also recommended.
- **6. Training Decisions:** The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Aircraft Electrical and Environmental Systems Career Field.

The spectrum includes a strategy for when, where, and how to meet these training requirements. The strategy must ensure we develop affordable training, eliminate duplication, and prevent a fragmented approach to training. The following training decisions were made by MAJCOM Functional Managers and Subject Matter Experts (SMEs) at the career field Utilization and Training Workshop held at Sheppard AFB, 3-7 December 2001.

- **6.1. Initial Skills:** The overall content of what is currently being taught in Course J3ABR2A636 008 is outstanding. Recent GAS survey results indicate a 91% satisfaction rating by supervisors of new trainees. A thorough review of the course was accomplished to assess currency of proficiency codes, core tasks, resource constraints, and any other recommendations needed to improve the course. The course content basically remained the same. A few minor changes will be required in order to meet user needs. Those changes are internal issues that will be addressed by the 364 Training Squadron. The establishment of new training requirements created some equipment constraints. In order to eliminate/reduce those constraints, the following equipment will be needed:
  - 2 Wire Maintenance Kit
  - 1 New LOX Video
  - 2 Time Domain Reflectometer
  - 15 IETMs Laptops

- **6.2. Five-Level Upgrade Training**: The following changes to the 2A656 Career Development Course are needed:
  - Volume 1 will require a supplement. A lesson on Interactive/Electronic Technical Manuals will need to be developed and the lessons on processing and controlling material and funds management/depot level reparable deleted.
  - Volume 3 will require a rewrite. Lessons on Databus Channels/Principles operational fundamentals, troubleshooting an emergency generator system, and troubleshooting a single generator system will need to be developed.
  - Volume 5 will require a rewrite. The Oxygen cryotainer cart lesson needs draining and cleaning components added, and a new lesson on Nitrogen cryotainer carts developed, that covers operational fundamentals on a Libby or Zwick liquid cart. Removing and installing gaseous oxygen system components needs to be deleted

#### **6.3.** Seven-Level Upgrade Training.

- **6.3.1** The following changes to the 2A676 Career Development Course are needed:
  - Volume 1 will require a rewrite. A lesson on troubleshooting an emergency generator system will need to be developed. The current multi-generator lesson will be changed so as to utilized the C-17 multi-generator system. The lessons on using a Time domain reflectometer and elements of physics need to be deleted
- **6.3.2.** After reviewing Course J3ACR2A676 001, Aircraft Electrical & Environmental Systems Craftsman, the below deletions and additions need to be made. These changes will not reduce or added to the total time of 69 hours. The changes made are as follows:
  - Objective 1A ORM has been moved to objective 2A and expanded to include the 6 Steps and 7 Tools in a more in-depth explanation of the processes involved.
  - Objective 2A, Explosive Safety, has been deleted. ORM has been added. Radiation Hazards has been added. Flight line safety during vehicle operation has been added.
  - Objective 2B reflect changes from U&TW for implementation in the lesson plan. 623A documentation when, why and how to document has been added/
  - Objective 2C, STS items A2.4.1, A2.4.2 are deleted from the course. A2.7.2, A2.7.3, A2.7.4, A2.7.5.1, A2.7.5.2, and A2.7.5.3 have been move to Objective 2D. This objective will now only include the MESL, A2.4.8, and will be reduced from 13 hours to 4 hours. Objective 2D (add) STS items A2.7.2, A2.7.3, A2.7.4, A2.7.5.1, A2.7.5.2 and A2.7.5.3 and delete A2.7.8 and A2.7.9. Increase lesson to 8 hours.
  - Objective 2E, Technical Order Improvement Report and Idea Program, A2.9.6 and change proficiency code to 2b.
  - Objective 3A, no changes.
  - Objective 3B change lesson to include 7-level students inspecting previous maintenance accomplished by 3-level students in block 6. They will be required to brief the instructor of their findings. STS items A3.19.5 will change to a 3c and A3.22.1.4 will change to a 3c. The time will remain at 12 hours.
  - Objective 3C, no change required.
  - An objective will be added covering personal accountability as a production inspector.

- **6.4. Proficiency Training.** Any additional knowledge and skill requirements which were not taught through initial skills or upgrade training were assigned to continuation training. The purpose of the continuation training program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMSs must ensure individuals in Aircraft Electrical and Environmental Systems career field receive the necessary training at the appropriate point in their career.
- **7. Community College of the Air Force (CCAF) Academic Programs.** Enrollment in CCAF occurs upon completion of basic military training (BMT). CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree. In addition to its associate degree program, CCAF offers the following:
- **7.1. Occupational Instructor Certification.** Upon completion of instructor qualification training, consisting of the instructor methods course and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander and commandant for certification as an occupational instructor.
- **7.2 Trade Skill Certification.** When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The college uses a competency based assessment process for trade skill certification at one of four proficiency levels; Apprentice, Journeyman, Craftsman (Supervisor), or Master Craftsman (Manager). All are transcribed on the CCAF transcript.
- **7.3. Degree Requirements:** All airmen are automatically entered into the CCAF program. Prior to completing an associate degree, the 5-level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	
Program Elective	15
Technical Education; Leadership, Management, and Military	
Studies; or General Education	
Total	64

- **7.3.1. Technical Education** (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects and courses must be applied and the remaining semester hours applied from Technical Core or Technical Elective subjects and courses. Completion of the initial skills resident training at Sheppard AFB satisfies all or part of the technical education requirement.
- **7.3.2.** Leadership, Management, and Military Studies (6 Semester Hours): Professional military education and/or civilian management courses.
- **7.3.3. Physical Education** (4 Semester Hours): This requirement is satisfied by completion of Basic Military Training.

- **7.3.4. General Education** (15 Semester Hours): Applicable courses must meet the criteria for application of courses to the General Education Requirements (GER) and be in agreement with the definitions of applicable General Education subjects/courses as provided in the *CCAF General Catalog*.
- **7.3.5. Program Elective** (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects and courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied. See the *CCAF General Catalog* for details regarding the Associates of Applied Science for this specialty.
- **7.4.** Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an AETC Instructor should be actively pursuing an associate's degree. A degreed faculty is necessary for to maintain accreditation through the Southern Association of Colleges and Schools.

#### 8. Career Field Path

#### **8.1. Enlisted Career Path.** Table 8.1 identifies career milestones for the 2AXXX AFS.

Table 8.1	<b>Enlisted</b> (	Career Path		
		Gra	ade Requiren	nents
<b>Education and Training Requirements</b>	Rank	Average	Earliest	High Year Of Tenure
		Sew-On	Sew-On	(HYT)
Basic Military Training School				
<b>Apprentice Technical School</b> (3-Skill Level)	Amn	6 months		
	A1C	16 months		
<b>Upgrade To Journeyman</b> (5-Skill Level)	Amn	6 months		
- Minimum 15 months on-the-job training.	A1C	16 months		
- Minimum 9 months on-the-job training for retrainees.	SrA	3 years	28 months	12 Years
- Complete all 5-level core tasks on one MDS.				
- Complete appropriate CDC if/when available.				
Airman Leadership School (ALS)				
- Must be a SrA with 48 months time in service				
or be a SSgt Selectee.				
- Resident graduation is a prerequisite for SSgt				
sew-on (Active Duty Only).				
<u>Trainer</u>			<u>Certifier</u>	
- Qualified and certified to perform the task to			_	I qualified and certified
be trained.	_		eing certified	
- Must attend formal OJT Trainer Course and			rainer Course	and appointed by
by Commander.	Comm			
	_			except for AFSCs, duty
	_			rs with specialized
	training	g standardizat	ion and certifi	ication reuirements.

<b>Upgrade To Craftsman</b> (7-Skill Level)	SSgt	7.5 years	3 years	20 Years
- Minimum rank of SSgt.		J	,	
- Minimum 12 months on-the-job training.				
- Minimum 6 months on-the-job training for retrainees.				
- Complete all 5- and 7-level core tasks on one				
mission design aircraft.				
- Complete appropriate CDC if/when available.				
- Attend Craftsman course, if applicable.				
Noncommissioned Officer Academy (NCOA)	TSgt	12.5 years	5 years	24 Years
- Must be a TSgt or TSgt Selectee.				
- Resident graduation is a prerequisite for MSgt				
sew-on (Active Duty Only).	MSgt	16 years	8 years	26 Years
USAF Senior NCO Academy (SNCOA)	SMSgt	19.2 years	11 years	28 Years
- Must be a SMSgt or SMSgt Selectee.				
- Resident graduation is a prerequisite for				
CMSgt sew-on (Active Duty Only).				
- A percentage of top non-select (for promotion				
to E-8) MSgts attend the SNCOA each year.				
<b>Upgrade To Superintendent</b> (9-Skill Level)	CMSgt	21.5 years	14 years	30 Years
- Minimum rank of SMSgt.				

## 8.2. Base/Unit Education and Training Manager Checklist:

Table A8.2. Base/Unit Education and Training Manager Checklist	Table A8.2. Base/Unit Education and Training Manager Checklist							
Requirements for Upgrade to:	Y	N						
Journeyman								
- Has the apprentice completed mandatory CDCs, if available?								
- Has the apprentice completed all appropriate 5-level core tasks identified in the CFETP?								
- Has the apprentice completed all other duty position tasks identified by the supervisor?								
- Has the apprentice completed 15 months training (9 months for retrainees) for award of the 5-skill level?								
- Has the apprentice met mandatory requirements listed in specialty description, AFMAN 36-2108 (Airman Classification), and CFETP?								
- Has the apprentice been recommended by their supervisor?								
Craftsman								
- Has the journeyman achieved the rank of SSgt?								
- Has the journeyman completed mandatory CDCs?								
- Has the journeyman completed all core tasks identified in the CFETP?								
- Has the journeyman completed all other duty position tasks identified by the supervisor?								
- Has the journeyman attended 7-skill level Craftsman Course?								
- Has the journeyman completed a minimum 12 months UGT (6 months for retrainees) for award								
of the 7-skill level?								

TO: Squadron/CC	
FROM: Squadron Training Manager	
SUBJECT: Upgrade Trainee	
Trainee is prepared to be upgraded and has com	pleted all training requirements.
Training Manager	Supervisor

#### SECTION C - SKILL LEVEL TRAINING REQUIREMENTS

- **9. Purpose.** Skill level training requirements in the 2A6X6 career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in broad, general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific tasks and knowledge training requirements are identified in Part II, Section A, Specialty Training Standard (STS) and Section A and B of this CFETP.
- **10. Specialty Qualification Requirements.** The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. Unit work centers must develop a structured training program to ensure the following requirements are met.

#### 10.1. Apprentice Level Training.

#### 10.1.1. Specialty Qualification:

- **10.1.1.1. Knowledge:** Knowledge is mandatory of: electrical, electronic, and mechanical principles applying to aircraft E & E systems; concepts and application of maintenance directives; using and interpretation of wiring diagrams, blueprints, and technical orders; and proper handling, use, and disposal of hazardous waste materials. Apprentices must be qualified to remove and install system components, perform operational checks, and troubleshoot simple malfunctions using system schematics.
- **10.1.1.2.** Education: For entry into this specialty, completion of high school with courses in basic electronics, mathematics, general science and mechanics is desirable.
- **10.1.1.3. Training:** For award of AFSC 2A636, completion of a basic aircraft E&E systems maintenance course is mandatory.
- **10.1.1.4. Experience:** There is no experience necessary for entry into AFSC 2A636.
- **10.1.1.5. Other:** For entry into this specialty, normal color vision as defined in AFI 48-123 is mandatory.
- **10.1.2. Training Sources.** The initial skills course, J3ABR2A636 009, Aircraft Electrical and Environmental Systems Apprentice will provide the required knowledge and qualifications. Initial skills training encompasses electrical and environmental system theory and operation, electrical and electronic principles, system components, component removal and installation, introduction to maintenance concepts, general flight line maintenance practices, use of technical publications, maintenance documentation, and support equipment familiarization and use.
- **10.1.3. Implementation.** Upon graduation from Basic Military Training, airmen are assigned to the 82d Training Wing for completion of Course J3ABR2A636 009, Aircraft Electrical and Environmental Systems Apprentice. Completion of this course will result in award of the 3-skill level.

#### 10.2. Journeyman Level Training:

#### **10.2.1. Specialty Qualification:**

**10.2.1.1. Knowledge:** In addition to the 3-level qualifications, a 5-level must possess the knowledge and skills necessary to maintain electrical and environmental systems and associated

subsystems. An individual must be task qualified on inspecting aircraft electrical and environmental systems and components, troubleshooting and correcting system malfunctions, and repairing and replacing system components. Journeymen perform operational checks, component repair, and use and maintenance of test and support equipment. Individuals can apply the proper handling, use, and disposal of hazardous waste and materials.

- **10.2.1.2.** Education: There are no formal education requirements for upgrade to 2A656.
- **10.2.1.3. Training:** Requirements for the Journeyman level require completion of the 5-level CDC and completion of the core tasks specified in the STS.
- **10.2.1.4. Experience.** Qualification in and possession of AFS 2A636 and completion of all 5-level core tasks on one MDS aircraft identified in the STS is mandatory.
- **10.2.1.5. Other:** Normal color vision as defined in AFI 48-123 is mandatory.
- **10.2.2. Training Sources and Resources.** The 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS, or AFJQS. The CDC is written to build from the trainee's current knowledge base, and provides more in-depth knowledge to support OJT requirements.
- **10.2.3. Implementation.** The units utilizing this STS, exportable courses, and CDCs perform training to the 5-level. Upgrade to the 5-level requires completion of the 2A655 CDC and 15 months upgrade training.

#### 10.3. Craftsman Level Training:

#### 10.3.1. Specialty Qualification.

- **10.3.1.1. Knowledge.** In addition to the 5-level qualifications, an individual must possess advanced skills and knowledge of theory, concepts, principles and application of electrical and environmental systems. The 7-level must be able to supervise and train personnel to maintain electrical and environmental systems. They must be able to plan, schedule, and organize maintenance to ensure effective utilization of available resources. Qualification is required on advanced repair, inspection, troubleshooting, and diagnostic techniques. Historical documentation analysis is also required for all 7-levels.
- **10.3.1.2.** Education. There are no additional education requirements beyond those defined for the apprentice level.
- **10.3.1.3. Training.** Completion of CDC 2A676, CDC 2AX7X, and the resident 7-level course, J3ACR2A676 003, at Sheppard AFB TX is mandatory for upgrade to AFSC 2A676.
- **10.3.1.4.** Experience. Completion of all required 7-level core tasks as identified in the STS, and qualification in and possession of AFSC 2A656. Also, experience performing or supervising functions such as installing, maintaining, or repairing aircraft E & E systems.
- **10.3.1.5. Other.** Normal color vision as defined in AFI 48-123 is mandatory.
- **10.3.2. Training Sources and Resources.** Seven-level upgrade training will be conducted by certified trainers using AF core tasks, unit/MAJCOM specific courses, and the formal 7-level course, J3ACR2A676-000. The 7-level CDC and resident courses are written to provide advanced system and management knowledge, and troubleshooting skills.
- **10.3.3. Implementation.** The units utilizing the STS, and CDCs perform training to the 7-level. Upgrade to the 7-level requires completion of CDC 2AX7X and CDC 2A675, completion of all core tasks, 12 months upgrade training, completion of the advanced (Craftsman) in-resident technical school, and promotion to E-5.

- 10.4. Superintendent Level Training (9-Level).
- 10.4.1. Specialty Qualification.
- **10.4.1.1. Knowledge.** In addition to 7-level qualifications, an individual must possess advanced skills and knowledge of concepts and principles in the management of aircraft maintenance. The 9-level needs to be an effective leader; must be able to forecast, budget and manage funds and other resources; and must be knowledgeable of all environmental standards and ensure adherence to the proper handling and disposal of hazardous materials.
- **10.4.1.2. Education.** There are no additional requirements beyond those defined for the apprentice level.
- **10.4.1.3. Training.** For award of AFSC 2A690, completion of the Senior NCO Academy and promotion to SMSgt is mandatory
- **10.4.1.4. Experience.** Qualification in and possession of AFSC 2A676. Also, experience managing or directing repair activities for electrical and environmental systems and associated maintenance functions.
- **10.4.1.5. Other.** Normal color vision as defined in AFI 48-123 is mandatory.
- **10.4.2. Training Sources and Resources.** The Senior NCO Academy and unit OJT will be used for training.
- **10.4.3. Implementation.** The 9-level will be awarded upon promotion to SMSgt. Individuals must attend the Senior NCO Academy in-residence or complete the correspondence course.

#### SECTION D - RESOURCE CONSTRAINTS

- 11. Purpose: This section of the CFETP identifies known resource constraints which preclude optimum and desired training from being developed or conducted, including information susch as cost and manpower. Narrative explanations of each resource constraint and an impact statement describing what effect each constraint has on training are included. Also included in this section are actions required, office of primary responsibility, and target completion dates. Resource constraints will be, as a minimum, reviewed and updated annually.
- **12.1. Constraints.** Two training requirements listed in Attachment 2 are constrained based on availability of equipment at the 364 Training Squadron.
  - A2.9.3. Use interactive/electronic technical manuals 2b/X
- **12.2. Resources Required.** Fifteen laptop computer are required to support training on item A2.9.3. Use interactive/electronic technical manuals.
- 13. Journeyman Level Training. No constraints noted.
- **14.** Craftsman Level Training. No constraints noted.
- Section E. Transitional Training Guide. There are no transition training requirements.

#### **PART II**

#### SECTION A - SPECIALTY TRAINING STANDARD

- **1. Implementation.** This STS will be used for technical training provided by Air Education and Training Command (AETC) for classes beginning 03 Oct 2002.
- **2. Purpose.** As prescribed in AFI 36-2201, this STS:
- **2.1.** Lists in the column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties in the 3-, 5-, and 7-skill level. An asterisk (\*) before the number indicates a wartime course objective.
- **2.2.** Identifies in column 2 (Core Tasks) by asterisk (\*), specialty-wide training requirements. Core tasks identified with an \*R are optional for the AFRC and the ANG. MAJCOM Functional Managers, commanders, and supervisors may designate additional critical tasks as necessary. When designated, certify these critical tasks using normal core task certification procedures. As a minimum, third-party certification on all AFCFM-directed core tasks is required for skill level upgrade. Exemptions:
- **2.2.1.** Core tasks which are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training)
- **2.2.2.** For units with more than one mission design (e.g. A-10) aircraft, upgrade trainees need only complete core tasks on a single mission design. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional mission design aircraft, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one mission design aircraft. *Flightline-assigned personnel must complete backshop core tasks and vice versa*. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.
- **2.2.3.** Units that use the GO81 maintenance data collection system do not need to complete Core Automated Maintenance System (CAMS) Computer Based Training (CBT) core tasks. However, these units must be capable of training CAMS related CBT core tasks for deployment preparation. This capability ensures GO81 users are capable of operating CAMS prior to deploying to CAMS using units. This requirement will remain in effect until GO81 and CAMS are converted to the Integrated Maintenance Data System (IMDS).
- **2.3.** Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use CAMS to document technician qualifications, if available. Task certification must show a certification or completed date.
- **2.4.** Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as result of training on the task/knowledge and the career knowledge provided by the correspondence course.

- **2.5. Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.
- **2.6. Job Qualification Standard**. Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:
- **2.6.1 Documentation.** Document and certify completion of training IAW AFI 36-2201, Vol. 3. Automated records, utilizing Core Automated Management System (CAMS) reflecting this STS is highly encouraged. Use of attachments one, two, and four are mandatory in individual training records along with CFETP Part I and Part II, Section A. Use of at least one of attachments three or five through fifteen is required.
- **2.6.1.1.** Converting from Old Document to CFETP. All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications. Document and certify all previous and current training IAW AFI 36-2201.
- **2.7.** Is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron, by Senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in AFI 36-2502, *Airman Promotion Program*. WAPS is not applicable to the Air National Guard or Air Force Reserve.
- **3. Recommendations.** Report unsatisfactory performance of individual course graduates to the AETC Training Manager at 364 TRS/TRR, 511 9<sup>th</sup> Ave. Suite 1, Sheppard AFB TX, 76311-2338, DSN 736-2772. Reference specific STS paragraphs. For a quick response to problems, call our customer service information line, DSN 736-2574.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL MICHAEL E. ZETTLER, Lieutenant General, USAF DCS/Installations and Logistics

#### 15 ATTACHMENTS

- 1. Proficiency Code Key (Mandatory)
- 2. Training Requirements, Fundamentals (Mandatory)
- 3. Training Requirements, Generic (Mandatory, except as indicated in note 1)
- 4. Training Requirements, CDC 2AX7X (Mandatory)
- 5. Training Requirements, B-2 (Optional)
- 6. Training Requirements, C-5 (Optional)
- 7. Training Requirements, C-9 (Optional)
- 8. Training Requirements, C-17 (Optional)
- 9. Training Requirements, C-130 (Optional)
- 10. Training Requirements, C-141 (Optional)
- 11. Training Requirements, F-15 (Optional)
- 12. Training Requirements, F-16 (Optional)
- 13. Training Requirements, KC-10 (Optional)
- 14. Training Requirements, KC-135 (Optional)
- 15. Training Requirements, MH-53 (Optional)

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## MH-53 TRAINING REQUIREMENTS

CFETP 2A6X6 Change 1. January 2003

	CFETP 2A6X  2. Core Tasks  3. Certification For OJT								4. Profic	ciency Code	es Used To Intion Provide 1)	ndicate d
1. Tasks, Know	vledge And Technical References			A	В	С	D	Е	A 3 Level	B 5 Level	C 7 Lev	vel
		5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	(1) Course	(2) CDC
A15.3.5.1.	External Power Monitor Panel								-	-	-	-
A15.3.5.2.	External power receptacle								-	-	-	-
A15.3.6.	Inspect System Components		*						-	-	-	-
A15.4.	LIGHTING SYSTEMS											
	TR: 1H-53(M)J-2-6											
A15.4.1.	Operational Fundamentals											
A15.4.1.1.	Interior								-	-	-	-
A15.4.1.2.	Exterior	*							-	-	-	-
A15.4.1.3.	Emergency								-	-	-	-
A15.4.2.	Operational checks											
A15.4.2.1.	Interior								-	-	-	-
A15.4.2.2.	Exterior	*							-	-	-	-
A15.4.2.3.	Emergency								-	-	-	-
A15.4.3.	Troubleshoot											
A15.4.3.1.	Interior								-	-	-	-
A15.4.3.2.	Exterior		*						-	-	1	-
A15.4.3.3.	Emergency								-	-	-	-
★A15.4.4.	Inspect System Components		*									
★A15.4.5.	Remove Components								-	-	-	-
★A15.4.5.1.	Emergency Exit Lights								-	-	-	-
★A15.4.5.2.	Heels Light Tube								-	-	1	-
★A15.4.5.3.	PMG control Box								-	-	-	-
★A15.4.5.4.	Heels Battery								-	-	-	-
★A15.4.5.5.	Controllable Spotlight Assembly								-	-	-	-
★A15.4.5.6.	Slime Lights (Formation Lights)								-	-	-	-
★A15.4.5.7.	Strobe light								-	-	-	-
★A15.4.5.8.	NVG Segment lights								-	-	-	-
★A15.4.5.9.	SX-5 Light Assembly								-	-	-	-
★A15.4.5.10.	Lighting Control panels								-	-	-	-
★A15.4.5.11.	Dimmer Control Panels								-	-	-	-
★A15.4.6.	Install components								-	-	-	-
★A15.4.6.1.	Emergency Exit Lights								-	-	-	-
★A15.4.6.2.	Heels Light Tube								-	-	1	-
★A15.4.6.3.	PMG control Box								-	-	-	-
★A15.4.6.4.	Heels Battery								-	-	-	-
★A15.4.6.5.	Controllable Spotlight Assembly								-	-	1	-
★A15.4.6.6.	Slime Lights (Formation Lights)								-	-	-	-
★A15.4.6.7.	Strobe light								-	-	-	-

## MH-53 TRAINING REQUIREMENTS

CFETP 2A6X6 Change 1, January 2003

		2. C	Core	3. Certi	fication Fo	2710210	4. Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)					
1. Tasks, Know	vledge And Technical References			A	В	С	D	Е	A 3 Level	B 5 Level	C 7 Le	
		5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	(1) Course	(2) CDC
★A15.4.6.8.	NVG Segment lights								-	-	-	-
★A15.4.6.9.	SX-5 Light Assembly								-	-	-	-
★A15.4.6.10.	Lighting Control panels								-	-	-	-
★A15.4.6.11.	Dimmer Control Panels								-	-	-	-
★A15.4.7.	Repair System Component								-	-	-	-
★A15.4.8.	Bench Check Components								-	-	-	-
★A15.5.	LANDING GEAR SYSTEM											
	TR: 1H-53(M)J-2-1, 1H-53(M)J-2-6											
★A15.5.1.	Operational Fundamentals											
★A15.5.1.1.	Control								-	-	-	-
★A15.5.1.2.	Warning and indication								-	-	-	_
★A15.5.2.	Operational check											
★A15.5.2.1.	Control								-	-	-	-
★A15.5.2.2.	Warning and indication								-	-	-	-
★A15.5.3.	Troubleshoot											
★A15.5.3.1.	Control								-	-	-	-
★A15.5.3.2.	Warning and indication								-	-	-	-
★A15.5.4.	Inspect System Components								-	-	-	-
★A15.5.5.	Remove components											
★A15.5.5.1.	Landing Gear Control Panel								-	-	-	-
★A15.5.5.2.	Indicator								-	-	-	-
★A15.5.6.	Install components											
★A15.5.6.1.	Landing Gear Control Panel								-	-	-	-
★A15.5.6.2.	Indicator								-	-	-	-
A15.7.	FIRE WARNING SYSTEM											
	TR: 1H-53(M)J-2-1											
A15.7.1.	Operational fundamentals											
A15.7.1.1.	Engine pylon								-	-	-	-
A15.7.1.2.	Aux power plant (APP) and Heater								-	-	-	-
A15.7.2.	Operational check											
A15.7.2.1.	Engine pylon								-	-	-	-
A15.7.2.2.	Aux power plant (APP) and Heater								-	-	-	-
A15.7.3.	Troubleshoot											
A15.7.3.1.	Engine pylon								-	-	-	-
A15.7.3.2.	Aux power plant And Heater								-	-	-	-
A15.7.4.	Inspect System Components											
A15.7.4.1.	Engine pylon								-	-	-	-
A15.7.4.2.	Aux power plant (APP)								-	-	-	-

## MH-53 TRAINING REQUIREMENTS

CFETP 2A6X6 Change 1, January 2003

		2. C		3. Certi	fication For			110110	4. Proficiency Codes Used To In Training/Information Provided (See Attachment 1)			ndicate
1. Tasks, Knov	wledge And Technical References			A	В	С	D	Е	A 3 Level	B 5 Level	C 7 Lev	
		5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	(1) Course	(2) CDC
A15.7.5.	Remove components											
A15.7.5.1.	Detector								-	-	-	-
A15.7.5.2.	Control Amps.								-	-	-	-
A15.7.5.3.	Fire Warning Relay Assembly								-	-	-	-
A15.7.5.4.	Fire Warning Control Panel								-	-	-	-
A15.7.6.	Install components											
A15.7.6.1.	Detector								-	-	-	-
A15.7.6.2.	Control Amps.								-	-	-	-
A15.7.6.3.	Fire Warning Relay Assembly								-	-	-	-
A15.7.6.4.	Fire Warning Control Panel								-	-	-	-
★A15.7.7.	Repair System Components											
A15.7.8.	Bench Check System Components								-	-	-	-
A15.8.	FIRE EXTINGUISHING SYSTEM											
	TR: Applicable T.O.s											
A15.8.1.	Operational Fundamentals								-	-	-	-
A15.8.2.	Operational Check											
A15.8.2.1.	Engine								-	-	-	-
A15.8.2.2.	Aux Power Plant (APP)								-	-	-	-
A15.8.3.	Troubleshoot											
A15.8.3.1.	Engine								-	-	-	-
A15.8.3.2.	Aux power plant (APP)								-	-	-	-
A15.8.4.	Remove components											
A15.8.4.1.	Engine Fire Bottle								-	-	-	-
A15.8.4.2.	Aux power plant (APP) Fire Bottle								-	-	-	-
A15.8.4.3.	Squib / cartridge	*							-	-	-	-
A15.8.4.4.	Emergency Control Panel								-	-	-	-
A15.8.5.	Install components											
A15.8.5.1.	Engine Fire Bottle								-	-	-	-
A15.8.5.2.	Aux power plant (APP) Fire Bottle								-	-	-	-
A15.8.5.3.	Squib/ cartridge	*							_	-	-	-
A15.8.5.4.	Emergency Fire Control Panel								_	-	-	-
A15.8.6.	Repair System Components								_	-	-	-
A15.8.7.	Bench Check System Components								-	-	-	-
A15.9.	MASTER CAUTION/WARNING SYSTEM											
	TR: 1H-53(M)J-2-6											
A15.9.1.	Operational fundamentals								-	-	-	-
A15.9.2.	Operational check								-	-	-	-
A15.9.3.	Troubleshoot System								-	-	-	-

## MH-53J TRAINING REQUIREMENTS

Change 1 CFETP 2A6X6, January 2003

		2. C	Core ks	3. Certi	fication For		Proficiency Codes Used To Indicate Training/Information Provided (See Attachment 1)					
1. Tasks, Kno	wledge And Technical References			A	В	С	D	Е	A 3 Level	B 5 Level	C 7 Le	
		5	7	Tng Start	Tng Complete	Trainee Initials	Trainer Initials	Certifier Initials	Course	CDC	(1) Course	(2) CDC
A15.9.4.	Remove components											
A15.9.4.1.	Master Caution Panel								-	-	-	-
A15.9.4.2.	Advisory Panel								-	-	-	-
A15.9.4.3.	Master Caution Reset Light								-	-	-	-
A15.9.5.	Install components											
A15.9.5.1.	Master Caution Panel								-	-	-	-
A15.9.5.2.	Advisory Panel								-	-	-	-
A15.9.5.3.	Master Caution Reset Light								-	-	-	-
A15.9.6.	Inspect System Components								-	-	-	-
A15.9.7.	Repair System Components								-	-	-	-
A15.9.8.	Bench Check System Components								-	-	-	-
A15.10.	FUEL SYSTEMS TR: 1H-53(M)J-2-6											
A15.10.1.	Operational fundamentals											
A15.10.1.1.	In flight refueling (IFR)								-	-	-	-
A15.10.1.2.	Ground Refuel and Transfer System								-	-	-	-
A15.10.1.3.	Fuel Dump								-	-	-	-
A15.10.1.4.	Aux Tank Jettison System								-	-	-	-
A15.10.2.	Troubleshoot											
A15.10.2.1.	In flight Refueling (IFR)								-	-	-	-
A15.10.2.2.	Ground Refuel and Transfer System								-	-	-	-
A15.10.2.3.	Fuel Dump								-	-	-	-
A15.10.3.	Remove components											
A15.10.3.1.	Refuel Control Panel								-	-	1	-
A15.10.3.2.	Extend Harness								-	-	ı	-
A15.10.3.3.	Retract Harness								-	-	1	-
A15.10.3.4.	Bleed Air Selector Valve								-	-	-	-
A15.10.3.5.	Emergency Control Panel								-	-	-	-
A15.10.3.6.	Dimming Control Unit								-	-	1	-
A15.10.4.	Install components											
A15.10.4.1.	Refuel Control Panel								-	-	-	-
A15.10.4.2.	Extend Harness								-	-	-	-
A15.10.4.3.	Retract Harness								-	-	-	-
A15.10.4.4.	Bleed Air Selector Valve								-	-	-	-
A15.10.4.5.	Emergency Control Panel								-	-	-	-
A15.10.4.6.	Dimming Control Unit								-	-	-	-
A15.10.5.	Inspect System Components								-	-	-	-
A15.10.6.	Repair System Components								-	-	-	-

## **★13.** Training Detachment (TD) Courses.

For further information on the TD courses, contact the OPRs at:

372 TRS 373 TRS

912 I Ave Suite 3 912 I Ave Suite 4

Sheppard AFB, TX 76311-2361 Sheppard AFB, TX 76311-2362

DSN 736-4801 DSN 736-4679

COURSE NO. J4AMF/ASF/ AST:	COURSE TITLE	OPR	USER
2A6X6-005	C-5 ELECTRICAL SYSTEMS (PRIMARY)	373 TRS	AF
2A6X6-006	C-5 ELECTRICAL SYSTEMS (AIRFRAME)	373 TRS	AF
2A6X6-021	T-37 E & E Technician (DISCONTINUED)	372 TRS	AF
2A6X6-022	T-38 E & E Systems Technician (DISCONTINUED)	372 TRS	AF
2A6X6-024	T-1A E & E Systems (DISCONTINUED)	372 TRS	AF
2A6X6-026	KC-135R ELECTRICAL AND ENVIRONMENTAL CRAFTSMAN	373 TRS	AF
2A6X6-035	EC-130H SPECIAL SYSTEMS AIR CONDITIONING SYSTEM	373 TRS	AF
2A6X6-036	(M)H-53J HELICOPTER ELECTRICAL REPAIR CRAFTSMAN	373 TRS	AF
2A6X6-037	C-141 AIRCRAFT ELECTRICAL SYSTEM	373 TRS	AF
2A6X6-039	C-5 ENVIROMENTAL SYSTEMS (BLEED AIR AND OXYGEN)	373 TRS	AF
2A6X6-040	C-130E/H ELECTRICAL SYSTEMS	373 TRS	AF
2A6X6-041	C-130E/H Environmental Systems	373 TRS	AF
2A6X6-045	C-130 (SOF) ELECTRO/ENVIRONMENTAL SYSTEMS (O. MAINT.)	373 TRS	AF
2A6X6-052	C-5 ENVIRONMENTAL SYSTEM (FIRE SUPPRESSION SYSTEM)	373 TRS	AF
2A6X6-063	F-117A Acft E&E System Journeyman	372 TRS	AF
2A6X6-067	C-5 ELECTRICAL SYSTEMS CRAFTSMAN (UTILITY SYSTEMS)	373 TRS	AF
2A6X6-069	E-4B ENVIRONMENTAL CRAFTSMAN	373 TRS	AF
2A6X6-070	E-8C ELECTRO/ENVIRONMENTAL	373 TRS	AF
2A6X6-076	F-16 Environmental Systems, (Certification Training)	372 TRS	AF
2A6X6-077	F-16 Electrical Only System(Certification Training)	372 TRS	AF
2A6X6-078	B-1B AIRCRAFT ELECTRICAL & ENVIRONMENTAL SYSTEMS	372 TRS	AF
2A6X6-080	AIRCRAFT ELECTRO/ENVIRONMENTAL SYSTEM JOURNEYMAN (E-3)	373 TRS	AF

COURSE NO.	COURSE TITLE	OPR	USER
J4AMF/ASF/ AST:			
2A6X6-081	B-2 Acft E & E Systems	372 TRS	AF
2A6X6-083	A-10A ECS	372 TRS	AF
2A6X6-084	F-16 C/D Electrical & Environmental Sys	372 TRS	AF
2A6X6-086	B-52H Acft E & E Systems	372 TRS	AF
2A6X6-089	C-17 ELECTRO-ENVIRONMENT TRANSITION	373 TRS	AF
2A6X6-090	C-17A FLOTATION EQUIPMENT DEPLOYMENT SYSTEM (FEDS)	373 TRS	AF
2A6X6-092	E-4B Electrical Craftsman (O. Maint.)	373 TRS	AF
2A6X6-093	U-2S ELECTRICAL AND ENVIRONMENTAL SYSTEMS	373 TRS	AF
2A6X6-094	C-130J Electro/Environmental Systems Repair (O. Maint.)	373 TRS	AF
2A6X6-096	C-130E/H Electrical System Upgrade (O. Maint.)	373 TRS	AF
2A6X6-097	A-10A Acft Elect Systems	372 TRS	AF
2A6X6-097	A-10A Acft Elect Systems	372 TRS	AF
2A6X6-098	RC-135/F108 ELECTRICAL AND ENVIRONMENTAL DIFFERENCES	373 TRS	AF
2A6X6-099	KC-135R/T ELECTRICAL AND ENVIRONMENTAL CRAFTSMAN (TRANSITION)	373 TRS	AF
2A6X6-100	F-15A/D Acft E & E Systems (ECS Only)	372 TRS	AF
2A6X6-101	F-15E Acft E & E SYS (ECS Only)	372 TRS	AF
2A6X6-102	KC-10A ELECTRICAL AND ENVIRONMENTAL ADVANCED TROUBLESHOOTING	373 TRS	AF
2A6X6-104	KC-10A ELECTRICAL AND ENVIRONMENTAL SYSTEM CRAFTSMAN	373 TRS	AF
2A6X6-106	F-15 Acft E & E Systems (Electrics Only)	372 TRS	AF
2A6X6-107	F-16 Wire Repair	372 TRS	AF
2A6X6-108	EC-130 Antenna Jettison System (O. Maint.)	373 TRS	AF
2A6X6-110	RC/TC-135( ), WC-135C/W AND OC-135B ELECTRICAL/ENVIRONMENTAL CRAFTSMAN (CRT)	373 TRS	AF
2A6X6-112	H-60 ELECTRICAL SYSTEMS CRAFTSMAN (O MAINT)	373 TRS	AF
2A6X6-114	KC-135R/T ELECTRICAL/ENVIRONMENTAL SYSTEM TROUBLESHOOTING	373 TRS	AF

## 14. Courses Under Development/Revision. N/A